REMARKS

This communication is submitted in response to the Office Action of November 7, 2005.

Claims 1-18 are pending in the subject patent application. Claims 1, 2, 4, 8-10, 12, 14, 16 and 18 have been amended. Claims 19-31, which were withdrawn from consideration by the Examiner as being directed to separate inventions, have been canceled. Claims 3, 5-7, 11, 13, 15 and 17 have not been changed relative to their immediate prior version.

The specification has been amended to modify the title of the invention for consistency with the claims remaining in the subject patent application.

The amendments to the claims are clearly supported by the specification as originally filed and do not introduce any new matter.

Reconsideration of the subject patent application is respectfully requested in view of the foregoing amendments and the following remarks.

The rejection of claims 1 and 10 under 35 USC §112, second paragraph, is submitted to be overcome with the present amendment. In particular, independent claim 1 has been amended to recite the second portions of the end plate and the attachment plate as being opposite the first portions of the end plate and the attachment plate. Claim 10 has been amended to provide antecedent basis for the space between the upper surface of the lower clamp member and the lower surface of the upper clamp member. Accordingly, the rejection of claims 1 and 10 under 35 USC §112, second paragraph, is addressed and overcome with the present amendment, and this rejection should be withdrawn.

Claims 2, 4, 8, 9, 12-14, 16 and 18 were objected to by the Examiner as being dependent upon a rejected base claim but were indicated as being allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Claims 2, 4, 8, 9, 12, 14, 16 and 18 have each been amended to be rewritten in independent form to include all of the limitations of the base claim and any intervening claims, and each of claims 2, 4, 8, 9, 12, 14, 16 and 18 should now be allowable along with claim 13 which depends from claim 12.

The rejection of claims 1, 3, 5, 6, 10, 11, 15 and 17 as being unpatentable over Jensen et al is respectfully traversed for the following reasons.

Initially, it is pointed out that the claimed invention relates to a clamp for clamping together two different plate components, i.e. the attachment plate of a feedwater sparger end bracket assembly and the end plate of a feedwater sparger, within a boiling water reactor vessel. In contrast, each clamp assembly 38 and 40 of Jensen et al clamps onto a single cylindrical structural component, i.e. header pipes 18 and 20, respectively. The clamp apparatus 36 of Jensen et al requires a strong-back assembly 42 to be attached on T-box junction 26 and coupled to the clamp assemblies 38 and 40 in order for different structural components in the boiling water reactor vessel to be clamped together. In addition to the clamp assemblies 38 and 40 of Jensen et al lacking the structural features needed for the clamp assemblies to, individually, clamp together two different structural components, the structure of the clamp assemblies 38 and 40 must be different from the structural features of the claimed clamp because each clamp assembly 38 and 40 clamps onto a single cylindrical pipe as opposed to multiple plates. As explained further below, Jensen et al fails to provide any teachings or suggestions

whatsoever which would have made the claimed invention obvious.

Independent claim 1 recites "a first clamp member including a first internal compartment..., said first internal compartment being defined between a pair of first internal walls..., said first internal walls being spaced from one another by a distance to receive a first portion of the attachment plate and a first portion of the end plate together between said internal walls with a close enough fit for the attachment plate and the end plate to be constrained against disconnecting from each other; a second clamp member including a second internal compartment..., said second internal compartment being defined between a pair of second internal walls..., said second internal walls being spaced from one another by a distance to receive a second portion of the attachment plate, opposite the first portion of the attachment plate, and a second portion of the end plate, opposite the first portion of the end plate, together between said second internal walls with a close enough fit for the attachment plate and the end plate to be constrained against disconnecting from each other...; and a connector securing said first and second clamp members to one another in said closed position, said clamp when secured in said closed position on the feedwater sparger end bracket assembly constraining the first portion of the attachment plate and the first portion of the end plate between said first internal walls and constraining the second portion of the attachment plate and the second portion of the end plate between said second internal walls." Each clamp assembly 38 and 40 of Jensen et al has upper and lower clamp bodies. However, the upper and lower clamp bodies of Jensen et al lack the features of the recited first and second clamp members, particularly internal walls spaced from one another by a distance to receive a portion of an attachment plate and a portion of an

end plate together between the internal walls with a close enough fit for the attachment plate and the end plate to be constrained against disconnecting from each other. As pointed out above, each clamp assembly 38 and 40 of Jensen et al merely clamps onto an individual pipe cylindrical 18 and 20, as opposed to multiple plates. Neither the upper clamp bodies or the lower clamp bodies of the clamp assemblies 38 and 40 have internal walls spaced from one another by a distance to receive portions of two different plates together between the internal walls, much less with a close enough fit for the plates to be constrained against disconnecting from each other. It follows that when the clamp assemblies 38 and 40 of Jensen et al are secured in a closed position on the respective pipes 18 and 20, neither clamp assembly constrains portions of multiple plates between internal walls of the upper and lower clamp bodies.

The clamp recited in claim 1 is required to be installed on an attachment plate of a feedwater sparger end bracket assembly and an end plate of a feedwater sparger, and this limitation necessarily results in non-obvious structural differences between the claimed invention and the clamp apparatus of Jensen et al, which is itself limited by its claims to installation on the header pipes 18 and 20 and T-box 26. The language in claim 1 which defines the first and second clamp members in relation to the attachment plate and the end plate within a boiling water reactor vessel are not merely statements of intended use but, rather, give "life and meaning" to the claim and provide positive limitations which must be accorded patentable weight. Corning Glassworks v. Sumitomo Electric, 9 UPSQ 2nd 1962, (Fed. Cir. 1989); Kropa v. Robie, 88 USPQ 478 (CCPA 1951). It follows that the first and second clamp members characterized in

independent claim 1 are not and cannot be considered structurally similar to the upper and lower clamp bodies of clamp assemblies 38 and 40 of Jensen et al.

As pointed out above, Jensen et al requires two different clamp assemblies 38 and 40 as well as a strong-back assembly 42 connecting the clamp assemblies 38 and 40, and fails to contemplate a single clamp for being clamped onto multiple plate components within a boiling water reactor vessel. Jensen et al thusly fails to provide any teachings or suggestions whatsoever which would have made the claimed invention obvious, except with the use of impermissible hindsight made possible from the teachings of the claimed invention itself. Accordingly, independent claim 1 is submitted to be clearly patentable over Jensen et al and should be allowed along with its dependent claims 3 and 5-7.

It is noted that dependent claim 7 was withdrawn from consideration by the Examiner. However, since claim 7 depends from independent claim 1 which should now be allowable, it is submitted that dependent claim 7 should also be allowable.

Independent claim 10 recites "an upper clamp member having a lower surface, an internal compartment open along said lower surface, an inner shoulder protruding downwardly from said lower surface and an outer shoulder protruding downwardly from said lower surface, said compartment being defined between spaced internal walls, said inner shoulder being parallel to said outer shoulder; a lower clamp member having an upper surface, an internal compartment open along said upper surface, an inner shoulder protruding upwardly from said upper surface and an outer shoulder protruding upwardly from said upper surface, said compartment of said lower clamp member being defined between spaced internal walls, said inner shoulder of said lower clamp member

being parallel to said outer shoulder of said lower clamp member; and a connector connecting said upper and lower clamp members..., said connector permitting adjustment of said space between said upper surface and said lower surface to receive an upper portion of the sparger/bracket junction in said compartment of said upper clamp member and a lower portion of the sparger/bracket junction in said compartment of said lower clamp member, said clamp constraining the sparger/bracket junction between said walls of said upper clamp member and between said walls of said lower clamp member, said clamp constraining the feedwater sparger end bracket assembly between said inner shoulder of said upper clamp member and said outer shoulder of said upper clamp member and between said inner shoulder of said lower clamp member and said outer shoulder of said lower clamp member". As pointed out above in connection with independent claim 1, the upper and lower clamp bodies of the clamp assemblies 38 and 40 of Jensen et al do not have spaced internal walls between which a sparger/bracket junction is constrained. In addition, neither the upper nor lower clamp bodies of the clamp assemblies 38 and 40 of Jensen et al have parallel shoulders as characterized in independent claim 10, and it is not seen where in Jensen et al the Examiner finds such shoulders to be disclosed or suggested. It follows that neither clamp assembly 38 or 40 of Jensen et al is capable of constraining a feedwater sparger end bracket assembly between inner and outer shoulders of the upper and lower clamp bodies as is required for the clamp recited in independent claim 10. In addition, the language in claim 10 relating the clamp to the sparger/bracket junction must be given patentable weight for the reasons discussed above in connection with independent claim 1. By this language, the clamp recited in claim 10 cannot bear structural similarity

to the clamp assemblies 38 and 40 of Jensen et al, each of which merely clamps a cylindrical pipe 18 or 20 between its upper and lower clamp bodies. In the absence of hindsight reconstruction, there are no teachings or suggestions whatsoever in Jensen et al which would have made the clamp of claim 10 obvious. Accordingly, independent claim 10 is submitted to be clearly patentable over Jensen et al along with its dependent claims 11 and 13.

Independent claim 15 requires each of the upper and lower clamp members to include a compartment receiving a portion of a sparger/bracket junction and having wall means for constraining the sparger/bracket junction in a direction horizontal to the boiling water reactor vessel. A compartment as characterized in independent claim 15 is not disclosed or suggested by Jensen et al for the reasons discussed above in connection with independent claims 1 and 10. Furthermore, independent claim 15 requires each clamp member to have inner and outer shoulder means for constraining the feedwater sparger end bracket assembly between the inner and outer shoulder means, and such shoulder means are not disclosed or suggested by Jensen et al as explained above in connection with independent claim 10. It is submitted, therefore, that independent claim 15 is clearly patentable over Jensen et al and should be allowed along with its dependent claim 17.

In light of the foregoing, all the claims in the subject patent application are submitted to be in condition for allowance. Action in conformance therewith is courteously solicited. Should any issues in the subject application remain unresolved, the Examiner is encouraged to contact the undersigned attorney.

Respectfully submitted,

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